

AMENDMENTS TO THE CLAIMS

1 - 30. (canceled)

31. (Previously Presented) An apparatus for assessing vehicle operator performance, the apparatus comprising:

a sensor fusion module, the sensor fusion module being coupled to a vehicle condition sensor, a vehicle exterior sensor, an operator condition sensor and an operator activity sensor respectively providing to the sensor fusion module vehicle condition data, vehicle environment data, operator condition data and operator activity data, the sensor fusion module operable to provide a master condition list based on the data received by the sensor fusion module; and

a response selector coupled to the sensor fusion module, the response selector being operable to determine an operator cognitive load based upon the master condition list and a current operating condition based upon the master condition list, and to assess an operator action in response to the current operating condition and operator cognitive load to provide an operator performance assessment value based upon the master condition list and the operator action.

32. (Original) The apparatus of claim 31, wherein the vehicle condition data comprises at least one of: vehicle speed, vehicle acceleration, throttle application, brake application, steering wheel input, throttle position, rate of change of throttle position, additional available throttle input, throttle applicator pressure, brake position, rate of change of brake position, additional available brake input, brake applicator pressure, steering wheel position, rate of change of the steering wheel position, operator pressure applied to the steering wheel and additional available steering input.

33. (Original) The apparatus of claim 31, wherein the operator activity data comprises usage data relating to at least one of driving controls, telematics controls, occupant comfort controls, infotainment controls and communication controls.

34. (Original) The apparatus of claim 31, wherein the operator condition data comprises data relating to at least one of fatigue, intoxication and distraction.

35. (Original) The apparatus of claim 31, wherein the vehicle environment data comprises data relating to at least one of road condition, lane following, headway, traffic control and traffic condition.

36. (Original) The apparatus of claim 31, wherein the operator performance assessment value comprises an inference value.

37. (Original) The apparatus of claim 31, wherein the vehicle exterior sensor comprises at least one of radar, laser, video and sonar.

38. (Original) The apparatus of claim 31, wherein the operator activity sensor comprises video.

39 – 40 (canceled)

41. (Previously Presented) The method of claim 31, wherein the operator cognitive load comprises an operator cognitive load determined based upon driver stress, driver attention, or driver mental capacity.

42. (Previously Presented) The method of claim 31, wherein the operator cognitive load comprises an operator cognitive load determined based upon driver stress, driver attention, and driver mental capacity.

43. (canceled)

44. (Previously Presented) The method of claim 31, wherein the response selector module compares monitored driving behavior to known good driving behavior when determining the operator performance assessment value.